

ARCHITECTURE

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PROFESSIONAL COMMENT.

WE PRESENT to our readers this month the drawings by Mr. H. S. Waterbury, New York, the winner of ARCHITECTURE Competition; the subject being "An Artist's Country House and Studio with Landscape Effects." The house is to be built of cement concrete with a tile roof on a comparatively level piece of ground facing West; fronting three hundred feet on the road with a depth of five hundred feet. The plot plan shows a place for a stable which is to be built later. The Second Prize was awarded to Mr. H. G. Simpson, Chelsea, Mass., whose perspective and plans are shown. The Committee of Award consisted of Mr. Albert Randolph Ross, Mr. H. VanBuren Magonigle and Mr. John F. Jackson.

THE relation of the architect to other professions, especially to those that have a natural affinity or are artistic, has altered very materially in modern times. In ancient and Mediaeval days we know that the architect was also the engineer, and in later times during the Renaissance of the Arts, he was often the sculptor, painter, and the landscape gardener. This unity of the arts or co-operation is attested in the architecture of these periods. If the architect or master builder did not practice all these arts himself he associated himself with those who did, and their joint work bore evidence of that relationship and harmony which are inspired by a common and united spirit. In these modern days nothing of the sort is observed. The artists and crafts carrying on these vocations are actuated by a very different motive; they may join the architect in the design and execution of the building, but they are not of it; they view themselves and their work as separate factors in the production of the architect's design—as so many different items in the total without any common aim. The truth is, the spirit of unity and brotherhood in one cause has departed; the separation of the arts is so complete that there is no longer any bond of union except that of self interest. These changes have made it no longer possible to unite together. With the separatedness of the arts has come the spirit of rivalry or competition, with all its attendant evils. To understand, then, the present break-up of the arts of architecture, sculpture, painting and landscape gardening, and the apparent hopelessness of inspiring them with a common motive, we must take into account the chaotic condition of the community which have led to the break-up and disunion of the arts. The organization of society under which this unity of arts subsisted is no longer possible; there are too many conflicting aims and opinions in matters of faith and policy to produce the conditions favorable for a reunion of art, so that we can only try to unite them on another basis in which intellect will have a share.

CLIENTS frequently alter their minds and expect the architect to adjust his claims accordingly, not considering that the skill and labor they have entailed is deserving of remuneration. Take a common instance of this. A client instructs an architect to prepare plans for a house of certain accommodation to be built on a given site. The plans are prepared and submitted, estimates are received which exceed the sum the client intended to expend; he thereupon instructs his architect to reduce the expenditure by certain reductions in the plan. The work is carried out to the reduced plans, the architect sends in his account for his labor, but the client refuses to pay on anything beyond the commission on the reduced building. Of course, the architect resents. He has prepared

practically two designs, and he is only to be paid on the reduced one. If there was any actual agreement to the effect that plans were to be prepared to cost a certain amount, if carried into execution, or that the client was only to pay on the plans actually carried out, there would be nothing to be said on the matter. There would be a contract between the parties, and the architect, no doubt, would prepare his plans knowing the condition he had entered into with his employer. But such an agreement is seldom entered into. The client wants a house containing so many rooms, and to be built in a certain style without any reservations as to cost, etc. Plans are prepared and submitted, and perhaps estimates obtained, involving working drawings, specifications, and quantities. The architect expends much skill and thought upon the design, making it as complete as possible. It is absurd to imagine that his work is not to be remunerated because the estimate is too high, or the client alters his mind. The work has been done and ought to be paid for. The client has so much value in the design.

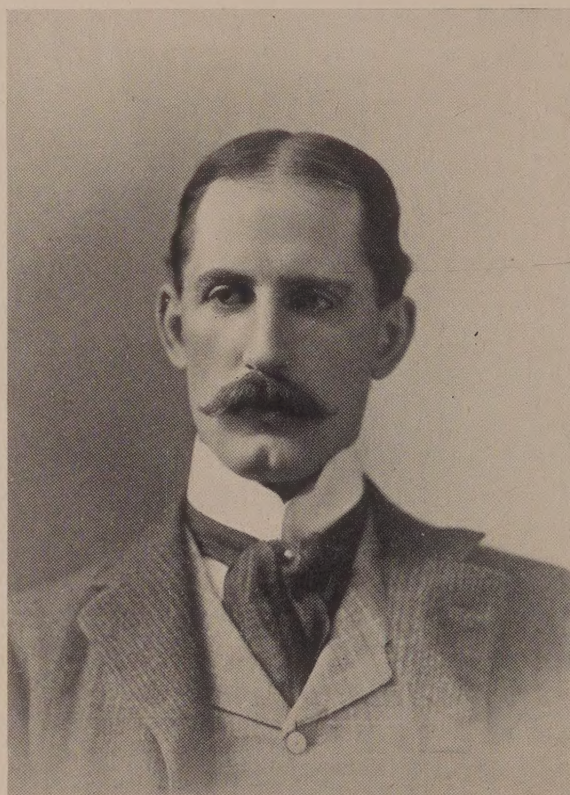
There are many people who are quite ignorant of the architect's work, who imagine he has only to refer to drawings and models for any special design, and that if they change their mind a dozen times he is just as ready to produce the required design with out any further labor. To such people the thought of paying for more than one design, the last approved one, is monstrous. Their idea of architecture is that it can be "turned on" at a moment's notice in the "penny in the slot" kind of way, though they forget the penny must be forthcoming every time before the automatic machine will work; they think all the previous designs of the architect must be thrown in. It is high time this popular idea should be exploded—that the client has a right to alter his mind at the cost of the architect's labor.

Why should people entertain such wrong notions as to cost of buildings, or imagine they are as good judges of the matter as the experienced architect? It would be very plain and straightforward if they would set a limit on their expenditure, and say at once what they were prepared to spend. The architect could not then complain if his designs were abandoned or set aside. But the client wants a certain building, and is determined to get it, by competition, as cheaply as he can, so he does not make any stipulation as to cost. The architect, on his part, is not called upon to bind himself to any stipulated sum, and the consequence is that the estimates received are often in excess of what the client desired. Perhaps it would be wiser and safer if the profession made clients who were desirous of building small houses for speculation stipulate the cost, or at least say the outside limit to which they would go. Nearly all the

disputes arising between clients and architects about small properties proceed from a misunderstanding on this fundamental point. The employer too often wants all he can get for a small amount; the architect is willing to satisfy his ambition, so that all plain speaking on the subject is carefully avoided.

THE want of relation between utility and artistic qualities must often painfully impress the architect in his endeavors to bring into harmony the exacting demands of the manager, the engineer, the specialist in sanitation, and others engaged in fitting up plant, with those of the decorative artist in any large building like a town hotel or club-house. In all structures of a domestic or public kind the *menage* has to be kept strictly in view: the housekeeper's wants, the necessities of a large family, social re-

quirements, are absolute. These all entail the employment of various specialists and tradesmen, who have to be reckoned with in the plan and construction. Advancing civilization has increased the requirements of housekeepers, cooks, engineers, and specialists. In Mediæval times the domestic and social arrangements were simple and modest; the art of cookery did not require all the scientific nicety and appliances of the modern *chef*; the baronial hall was simple but dignified, and the social habits and requirements did not call for any special arrangements or fixtures. The main conflict, therefore, between the utilitarian requirements of the modern building and its artistic design and unity is chiefly a matter of technical details, owing to the greater complexity of our modern tastes. Cannot the architect do something to simplify or minimize them? Just now, it must be confessed, there is a tendency to multiply those details and appliances which so complicate and hamper the architect's scheme. Crafts and craftsmanship themselves are being



Architects of To-Day.

MR. EVARTS TRACY.

multiplied, to the no small injury of art. Bewildering fittings and appliances in metal and ceramics, are being produced by our leading manufacturers—all clever, but many of them intensely vulgar or commonplace. Woodwork and furniture are now turned out in profuse variety by every great firm, in stock stereotyped designs, which hamper all invention and good taste. Even more multifarious are the productions of a decorative kind, in plaster, terra-cotta, substances moulded and cast in the form of wall and ceiling decoration. And can we number the output in metal work for all descriptions of builders' joinery and decorative fittings? The schools of arts and crafts, while propagating sound principles in design and workmanship, encourage the production of these things. Worst of all, these details and fittings do not spring out of the necessities of every building. They are not the outgrowth of the architect's design,

but are articles manufactured to sell, intended for every want. In the old times the architect designed his wooden fittings, paneling, joinery to suit the building. His metal work, furniture, fastenings, and hinges were designed and wrought for the special doors and purposes required. His plaster and decorative modelings were designed by him for special rooms. The wholesale manufacturer turns them out for every and any building, and it is this lack of purpose and relation that we deplore. The technical qualities override all the juster considerations of design and harmony. In many of these branches of manufacture improved designs may be seen, based on truer principles of treatment and material; but they are not the products of actual wants.

THE FAN SYSTEM OF HEATING AND VENTILATING FOR APARTMENT HOUSES.

IT SEEMS to be an almost universal opinion among architects and builders, that the Fan System is not suitable or well adapted for heating and ventilating apartment houses. This may be due, to some extent, to the fact that the architect considers it too much trouble to provide room for the air risers in his plans. Another cause of this opinion is the claim which some hold that a building divided up into so many small rooms makes the whole system too complicated, and therefore good results throughout the building at one and the same time are hard to obtain. There is very likely something in this objection but a difficult problem is not necessarily an impossible one. It seems to the writer that the main reason that so few apartment houses are heated with the Fan System is that it has not been tried and brought into prominence along this line.

The Fan System was installed in "The Dorothea," a twelve-suite apartment house owned by C. F. Schmidt of Cleveland, Ohio; this building is on Scoville Avenue, near Willson Avenue, and the building was designed by G. B. Bohm, architect, Cleveland, Ohio. The building is of brick construction, most of the partition walls being of plaster and wood. It is three stories high, having four suites to a floor. Six of the suites have six rooms and six have five rooms, and it is the parlor and dining-rooms, the two largest rooms of each suite, which are heated and ventilated by the Fan System. The air is changed in these rooms once in every ten minutes.

A sixty-inch full housing Buffalo Fan is used to supply the air and this is belted to a two horse-power induction motor. The heater is composed of five four row sections (3' x 4'-10"), with a total capacity of 1,365 feet, the heater ratio to the space heated being one to thirty-three. One of the sections is used as a tempering coil, the other four being in the heater proper with bypass beneath. The fan exhausts through the heater and blows the air into an underground duct which runs lengthwise through the basement floor. The ends of this duct are made of tile, and the larger part with brick laid in cement and covered with flag-stone. Several manholes with tight covers are provided. As there are four suites to a floor, four sets of air risers are provided. These are made of galvanized iron with volume dampers in them, and of such shape as to be run in the partition walls. There is one riser to each suite or twelve risers in all. The parlor and dining-rooms are adjacent in each case, so that the same riser supplies both. The air is discharged through registers at a height of seven feet from the floor, and vent flues are provided with their openings near the floor. The remaining rooms are heated by direct radiation; the steam for all the radiators and fan coils being supplied by a return tubular boiler at a pressure of five pounds.

It was the desire of the architect to have the air, used by the fan, cleaned before blowing it into the room, and also to arrange some means whereby it could be cooled during the summer months, so this was provided for as follows: The tempering coil was located just inside the window through which the fresh air was taken. Two feet in from the coil a coke screen was located. This screen consisted of two three-eighth inch mesh wire screens one foot apart, supported by wood posts, and having the one foot space between filled in with ordinary gas coke. The screens were about seven feet square, so that the air has to pass through a bed of coke 7' x 7' x 1' thick. A water pipe was led to the top of this screen and discharges a small stream of water into a trough which runs across the top of the coke screen. This trough is of galvanized iron and the bottom is full of fine holes so that the water is allowed to trickle down throughout the coke. The air, in passing through the coke screen, necessarily has to change its direction a good many times as it comes in contact with the coke, and the particles of dirt and soot held in suspension in the moving air come in contact with the wet surface of the coke, and adhere to it until washed off by the water. For fear that the air might bring too much moisture, or a spray of water through with it when the fan happened to be running at a high speed, another screen of same dimensions was located just fourteen inches in from the first. This was a dry screen and prevents the passage of too much moisture. The two screens are encased in a wood housing lined inside with galvanized iron, and this housing extends each way, connecting both to the tempering coil and to the main heater. The bottom of it drains to one point and out through a pipe, and thus carries off the dirt which has been taken from the air.

The actual operation of the apparatus brings results which are highly pleasing to all concerned. Not only is the air thoroughly cleaned, but it is cooled to a remarkable degree in very hot weather. The water used for the screen is taken from the city supply, which is pumped from Lake Erie. This building is about three miles from the lake, so the water travels that distance underground and gets cooled a good deal. And the air passing through the wet coke screen comes in contact with sufficient cooling surface to be greatly reduced in temperature. It was feared that the air would be too humid for comfort but it is not the case. During days this past summer when it was 80° Fahr. outside, it was possible to make it uncomfortably cool in the rooms of the building which were supplied with this air.

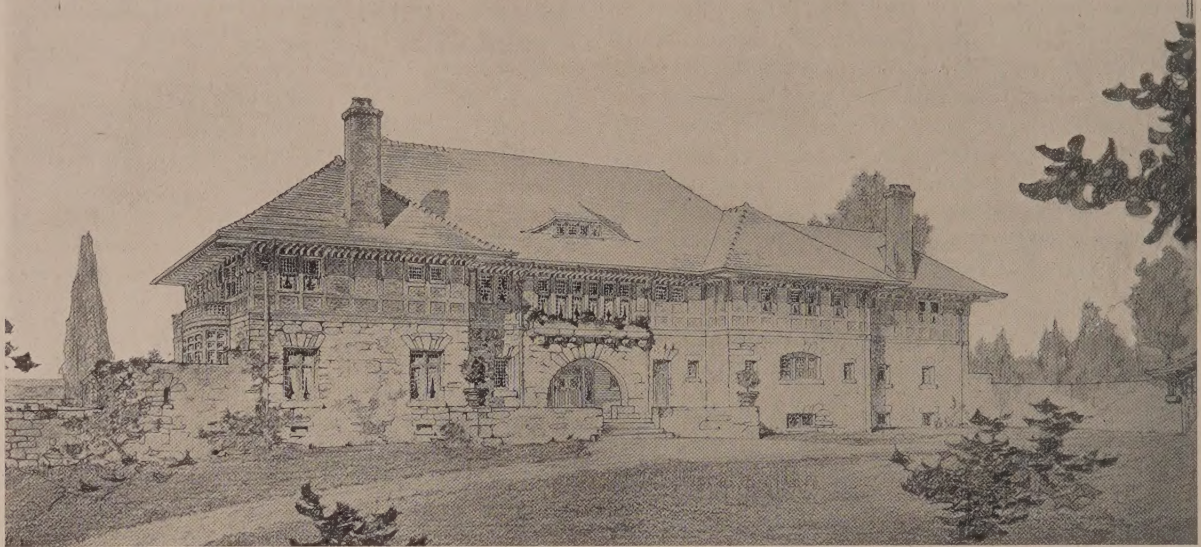
ADVICE TO STUDENTS.

ASTON WEBB, PRES'T R. I. B. A.

I WOULD first ask you on the threshold of your career: Are you quite sure you have chosen aright? No one can tell this so well as yourself, and you will probably by this time have had sufficient experience of what this career means to form a sound opinion, and I advise you deliberately, if you have any doubt, to throw it up *now*. You will be none the worse, but all the better, for the training you have had, and you will find it useful in other careers. If, on the other hand, you determine to go on, decide at the same time never to look back again. It is a career beset, of course, with difficulties, and one that requires a life-long training to enable you even to keep your place in it. Remember this training must be irksome to all who have not their heart in the work, and it will shut you out of many pleasures you will see others enjoy; it is so engrossing that you will inevitably find yourself becoming, to some extent at least, a one-sided man—a contingency which

HOUSE AT RIDGEFIELD CONN.

GROSVENOR ATTERBURY, ARCHT. N.Y.



certainly should not by anyone be lightly assumed. But, on the other hand, if your heart is in it you will find the ever-varying character of your work a never-ending delight, carrying you to many places and bringing you into contact with all sorts and conditions of men—a delight which cannot be excelled, and, indeed, can hardly be equaled in any other calling. But to arrive at this you must follow it with patience. Some young men seem to expect to attain success as soon as, or even before, they are out of their articles; the majority are necessarily doomed to disappointment. Work, you will find, is necessary, and that work must be life-long; there is no success or happiness without it. When a young genius was brought to Ruskin, his first question always was: "Does he work?" A clever man, he says, may be indolent, but a great man never. It is probably the ten years' succeeding pupilage that are the most important in the life of most architects, and will be the all-important ones in yours. How will you use them? Then you will begin to rely upon yourself and teach yourself, and cease to rely upon others—a very important difference. Mr. John Morley said in a speech of his, "What a splendid thing a man might make of his own life!" He did not add, because it is so evident, "What a poor, miserable thing he often does make of it!" It is for you to decide to make a splendid thing of yours. Start with high ideals, for they will be sorely tried. A famous painter told a gathering of students a short time ago that he never painted a picture that realized the ideals he had started with; and if this is true of a distinguished painter, how much more true of lesser men! If you take care to prepare yourselves and do the work that lies nearest to you as well and as thoroughly as you can, the work will come to you, and you will not even have to trouble how to *get* it: the way you *do* what does come to you is the all-important thing. I shall take it that most of you here to-night have completed, or are nearing the completion of, your articles, and are about to commence your professional life in one capacity or another. You have been, therefore, through a course of systematic instruction, most necessary and most useful, if a little dull, and you are now about to take a higher flight, urged,

let us believe, by an ideal impulse. Do not clip your wings; the head has been educated, now it is the turn of the heart.

We will assume you have got knowledge; but with all your getting you must get understanding. Get to the bottom of things and understand them. A well-stored memory is not the chief essential for an artist, though it is of great value to him. Cultivate curiosity and observation, and leave nothing unexplained. Now is your time. Some grow old without gaining any experience, through never having learnt to observe. Learn now how to learn, or you will never do it, and lead the "strenuous life." Don't be afraid of overwork; the number of people who overwork themselves is infinitesimal; the chances that you will be one of them are hardly worth taking into account. I would recommend you, for one thing, to know as many artists of about your own age as possible—architects, painters, and sculptors. Meet together as often as you can, talk what is called "shop" with them, visit buildings, paintings, and sculpture, old and new, together; criticise these things together, admire where you can and give your reasons, and when you must condemn give your reasons also; get all you can from your friends, and give them all you can in return.

You will read, of course, "a lot." A very successful artist friend of mine (not an architect) once told me he had always made a rule of reading not less than five hours a day, and he was a very busy man. Few of you can do that perhaps; but start with a high ideal, and map out a certain time every day for the purpose. You have already read your text books, your Fergusson, your Middleton, your Viollet-le-Duc, and so on, and now you will read more of the romance of architecture, the story of the building of St. Sophia, of the Duomo at Florence, of St. Peter's at Rome, and St. Paul's in London; the lives of great architects, painters, and sculptors of all generations and countries; how they looked at their art and the principles that guided them in the execution of their work; you will read your Ruskin, and in fact all the literature in connection with your art that you can lay your hands on (and there is no difficulty in that respect nowadays), for remember that your

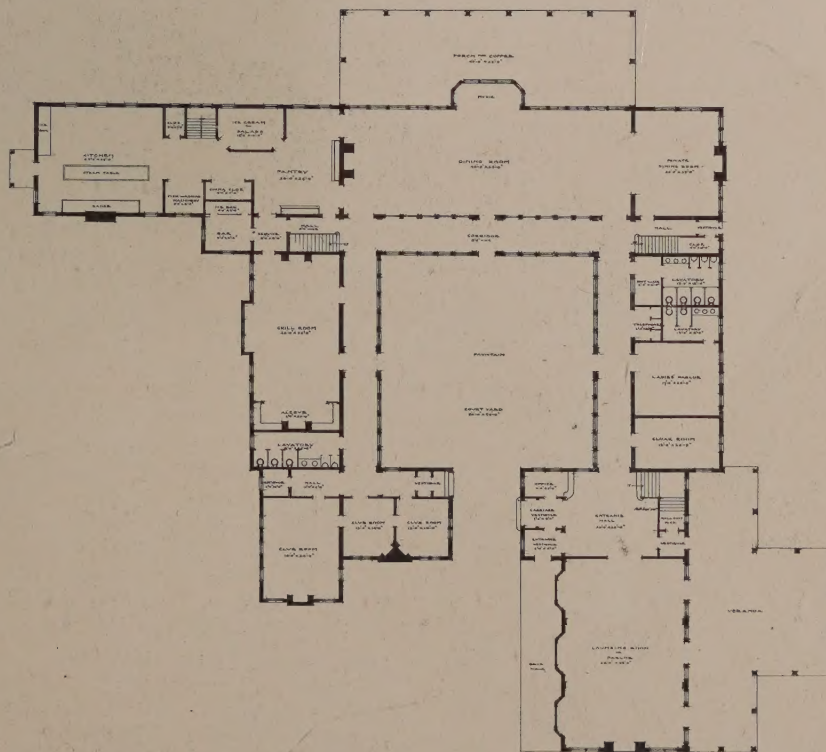
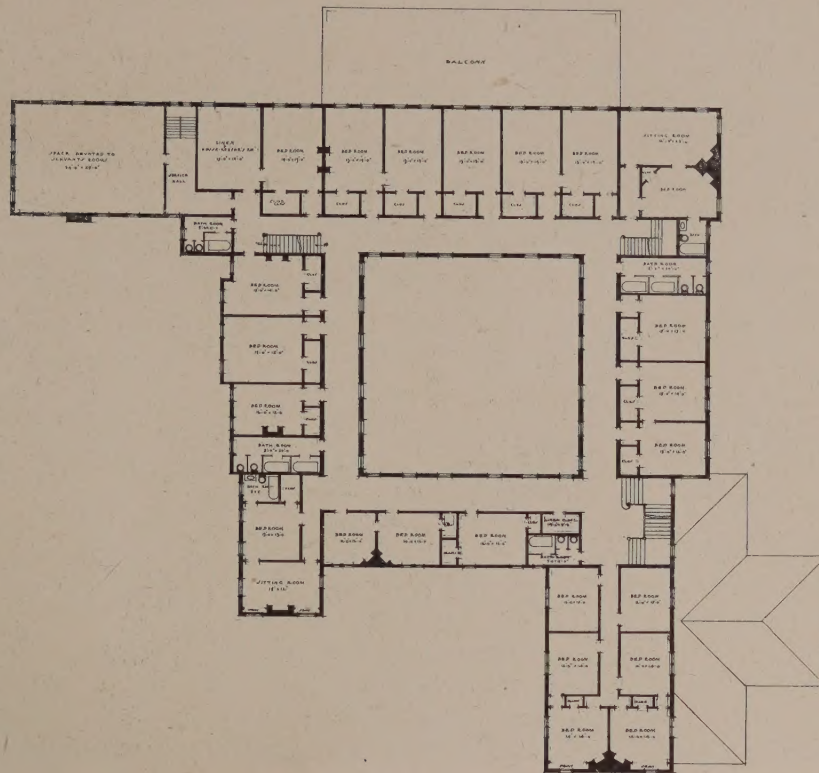
clients will expect you to know a great deal more about art in general and your own in particular than they do, and you must not let it be said of you, as a late Bishop of London said of a certain architect, "that he had sat next to him at dinner, and was astonished to find that he (the bishop) knew more about the Parthenon than the architect did himself!"

Then, of course, you will sketch existing buildings, new as well as old, and try to get at the principles of their design and construction. In my day we used to sketch and measure an arcade, a doorway, a front, or other detail easily accessible, draw it out prettily, and publish it in the Architectural Association *Sketch Book*, and, I am afraid, remain oblivious of the points in the plan, elevation, and section of the building which produced the result we admired but did not understand. You will make a rough note of the plan, elevation, and section of the building you are studying, and put on the leading dimensions, noting the thickness of the walls, the amount of lighting area, &c., and any distinguishing features this analysis brings out. Thus you will learn the vertebra of the building, although you will probably have no notes fit for publication; but you will know your building in its three dimensions; and you will be surprised, if you continue this plan, how it will give you a grasp of the general conception of buildings, which is what an architect should endeavor to arrive at. The detail is important—vitally important—but the conception is the principal thing; and as you come to design buildings yourself you will think of them in the same way as cubes, not as planes, and, having learnt what feet look like in existing buildings, you will at once understand what they will look like in your own buildings when they come to be realized from paper structures to real brick and stone. The great buildings of the world are admired because their dimensions are noble and proportionate one with the other. You will, there-

fore, never rest till you have obtained this rhythmical music of dimension. Then you will not think construction beneath your notice. It is at the root of all great architecture. Wren was a great constructor, the founder of the Royal Society, an inventor of scientific instruments, and a scientific man. Go into St. Paul's and stand under the dome and think; go up into the spire of Salisbury Cathedral (if the authorities will allow you) and think a little, and realize how greatly daring were the men who designed and erected these structures so that they have withstood the thrusts, the storms, and natural decay of centuries, and remain the admiration of mankind. Then you will also study materials—those that look well in work from color and texture, and that weather will improve by time. It is impossible, again, to exaggerate the importance of this toward a satisfactory building. You will also (if you are wise) keep a commonplace book and jot down dimensions of things as they come under your notice, because it will save you much time and trouble later, when your hands are full and your time can be better employed than in hunting these matters up.

And with regard to the drawings you send out to the works, you will remember that what you show is far more important than how you show it; and so you will make your drawings as practical as possible, and write all the instructions on them the workmen are likely to require; and you will be comparatively unconcerned as to how your building looks on paper, provided you can see in your mind's eye it will look well in reality. An architect's work is his building, let him produce it how he may. I have not, even now, enumerated half the branches of study in which you will have to instruct yourself; but, lest you should feel it an impossible task, I may say that you will find, as you master first one and then another, these subjects will dovetail one into another so that you will gradually, perhaps almost unawares, become a well-informed man in matters architectural.





FIRST AND SECOND FLOOR PLANS, INN, WILLIAMSTOWN, MASS. Petit & Green, Architects.



LIBRARY, RESIDENCE, GEO. SHEFFIELD, 115 EAST 40TH STREET, NEW YORK.

Geo. E. Wood, Architect. Wurts Bros., Photo.



DINING ROOM, RESIDENCE, GEO. SHEFFIELD, 115 EAST 40TH STREET, NEW YORK.

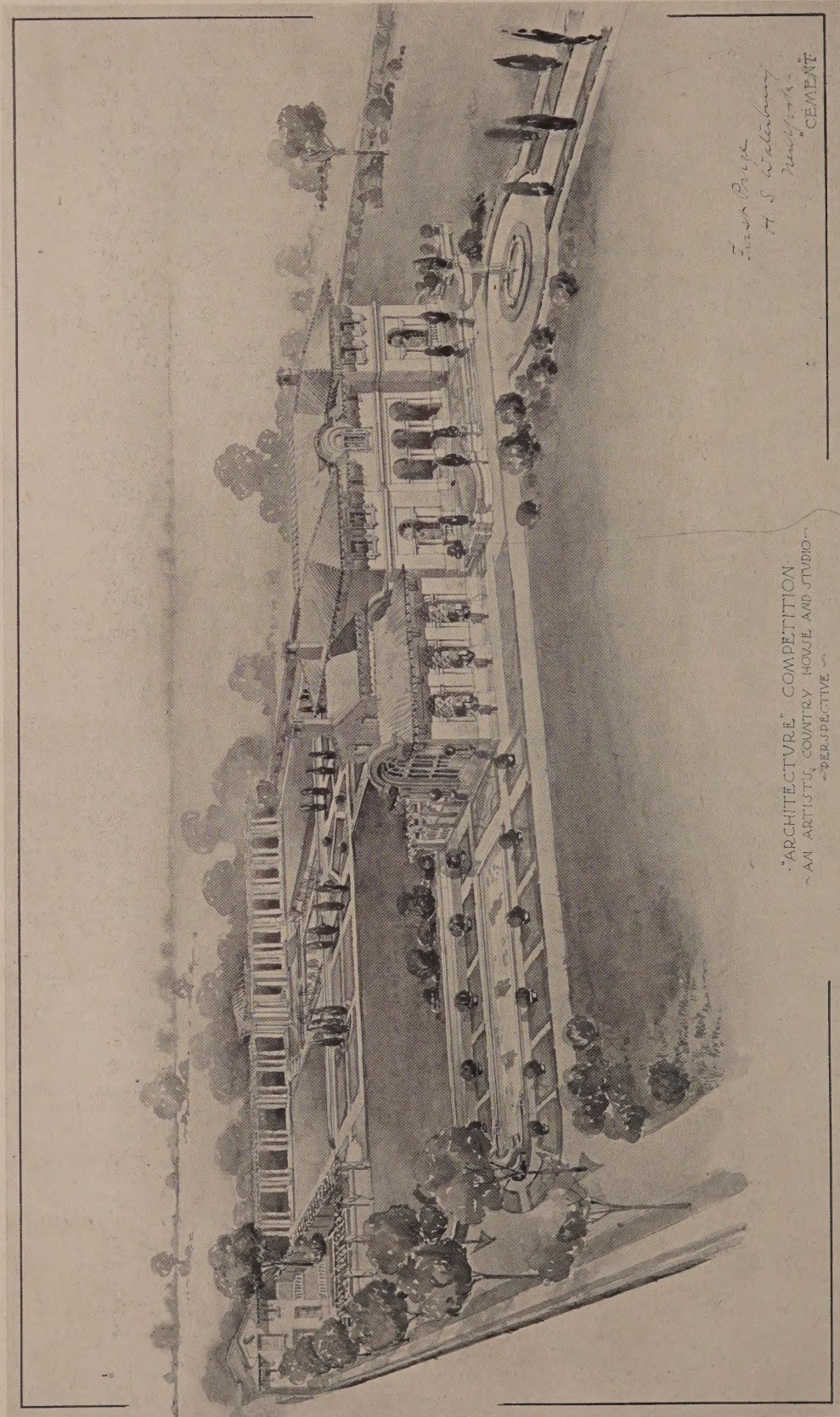
Geo. E. Wood, Architect. Wurts Bros., Photo.

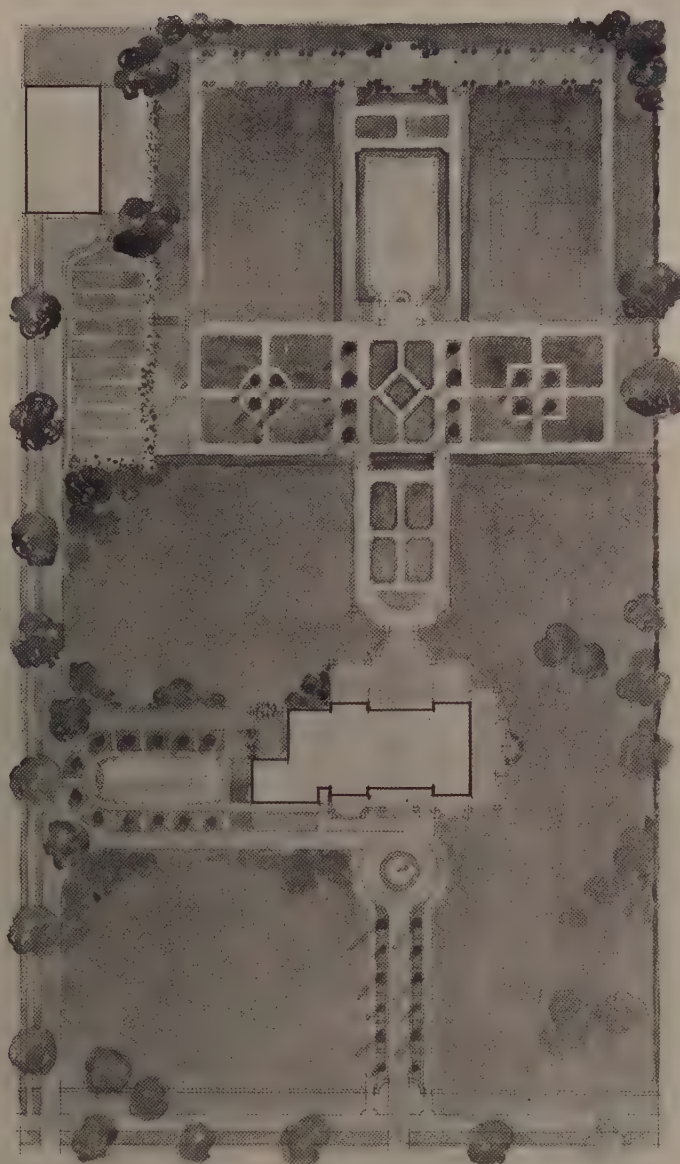


RECEPTION ROOM, RESIDENCE, GEO. SHEFFIELD, 115 EAST 40TH STREET, NEW YORK. Geo. E. Wood, Architect. Wurts Bros., Photo.



HALL (SECOND FLOOR), RESIDENCE, GEO. SHEFFIELD, 115 EAST 40TH STREET, NEW YORK. Geo. E. Wood, Architect. Wurts Bros., Photo.

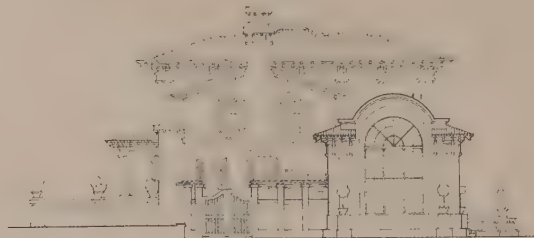




"ARCHITECTURE" COMPETITION.
 "AN ARTIST'S COUNTRY HOUSE AND STUDIO"
 PLOT PLAN.
 SCALE 1/32 INCH = 1 FOOT.

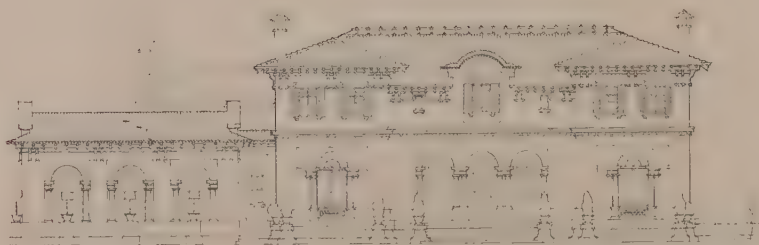
Wm. B. Page
H. Waterbury
New York

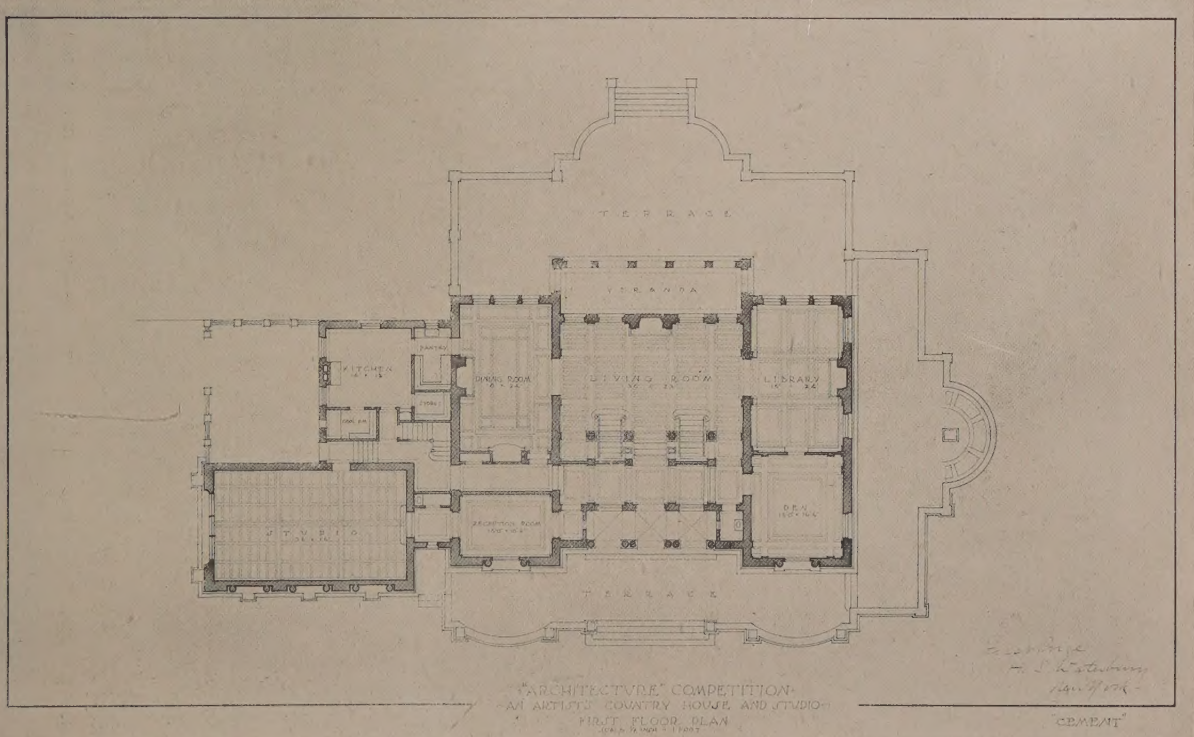
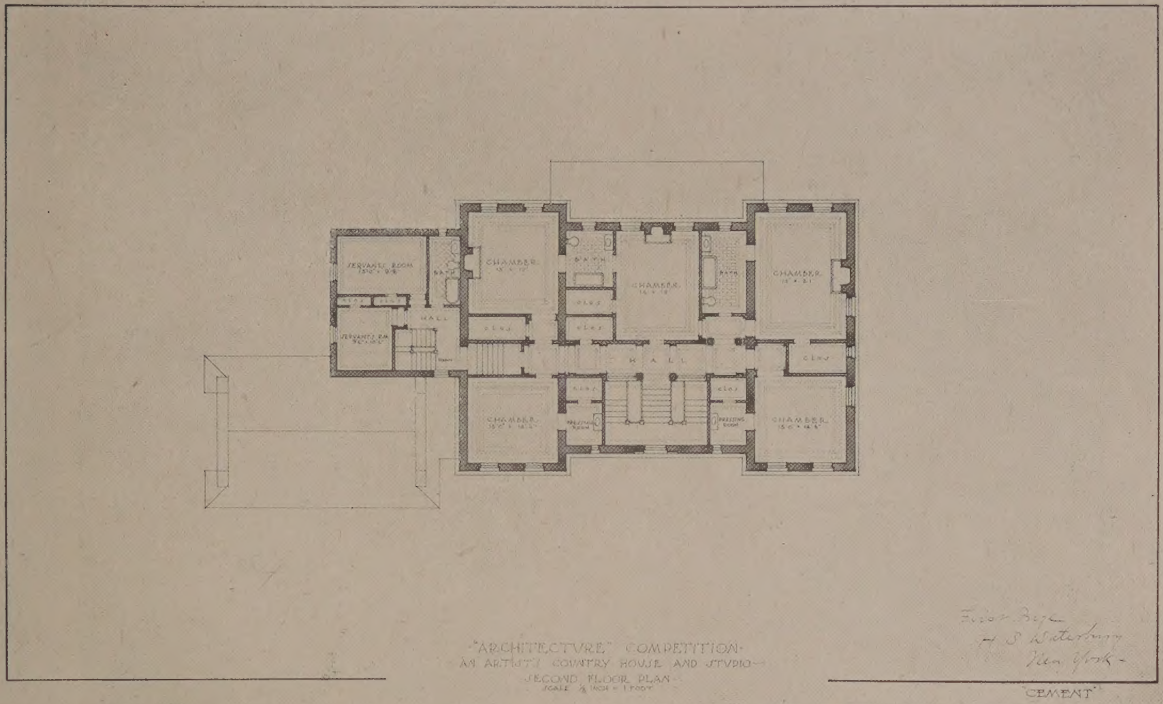
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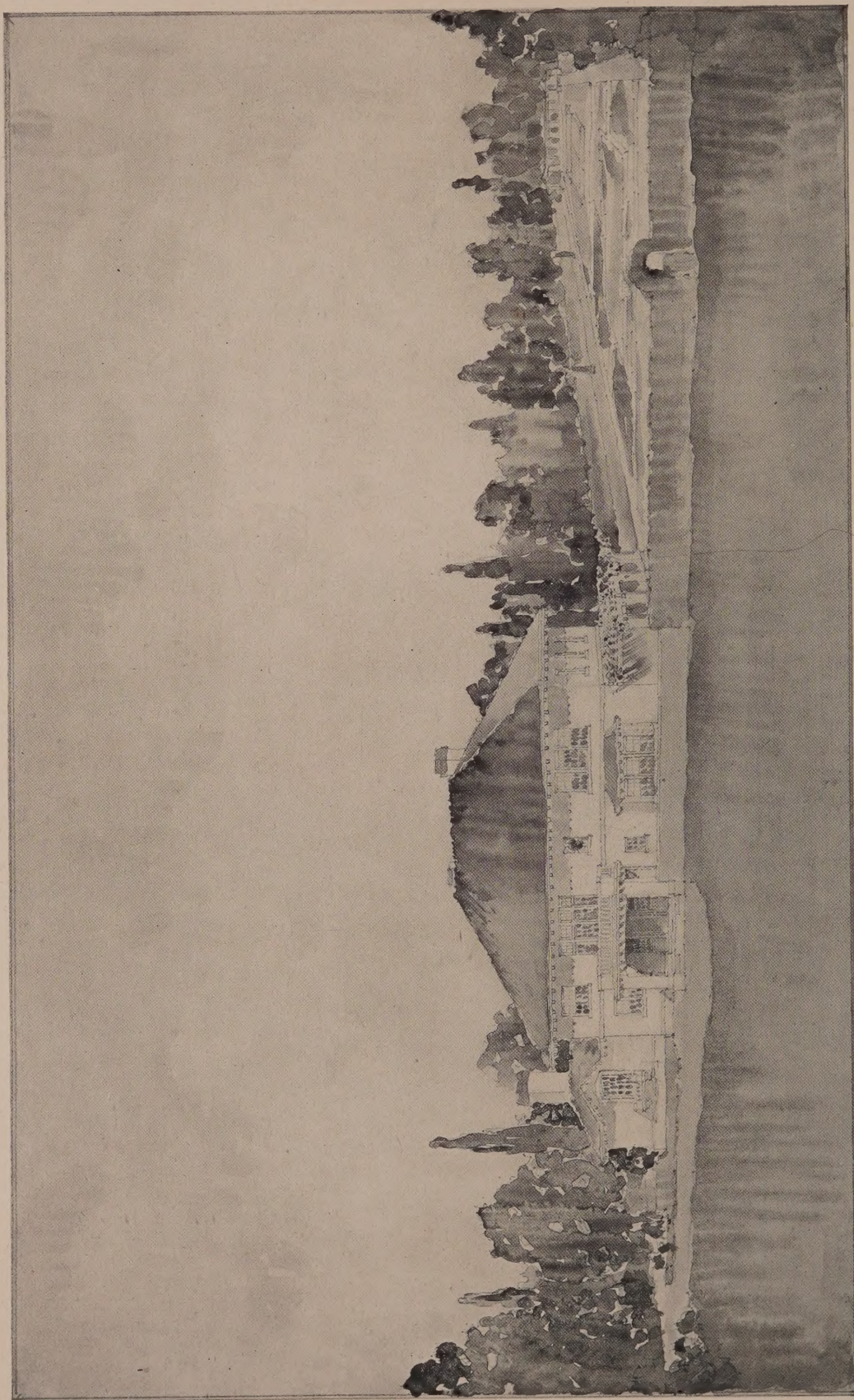


"ARCHITECTURE" COMPETITION
AN ARTIST'S COUNTRY HOUSE AND STUDIO
- SIDE ELEVATION
SCALE 1/8" = 1'-0"

1917

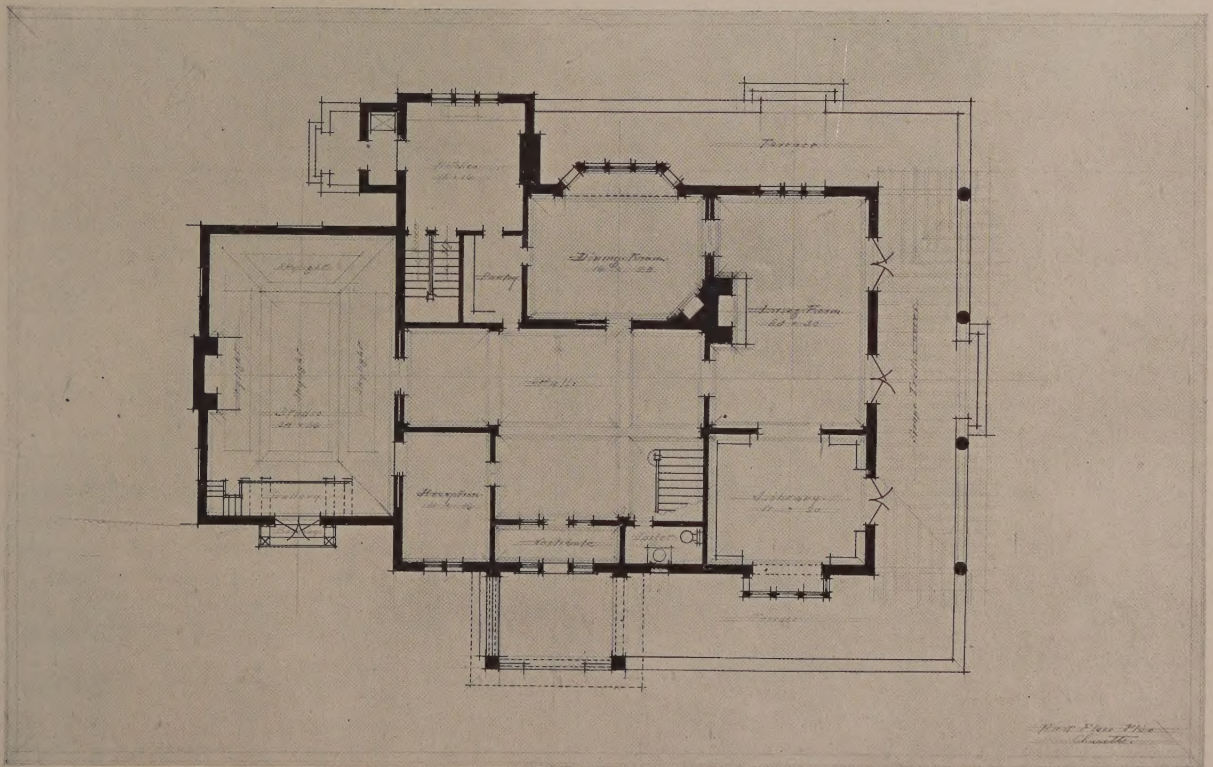
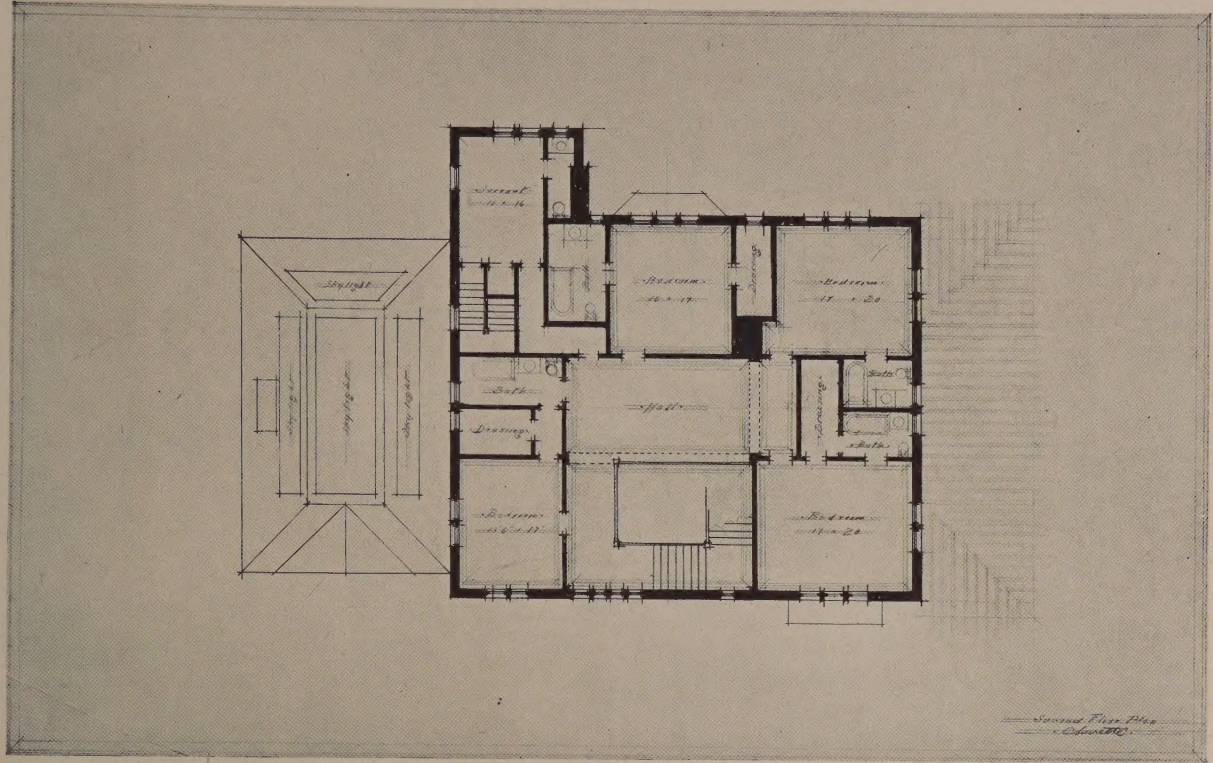




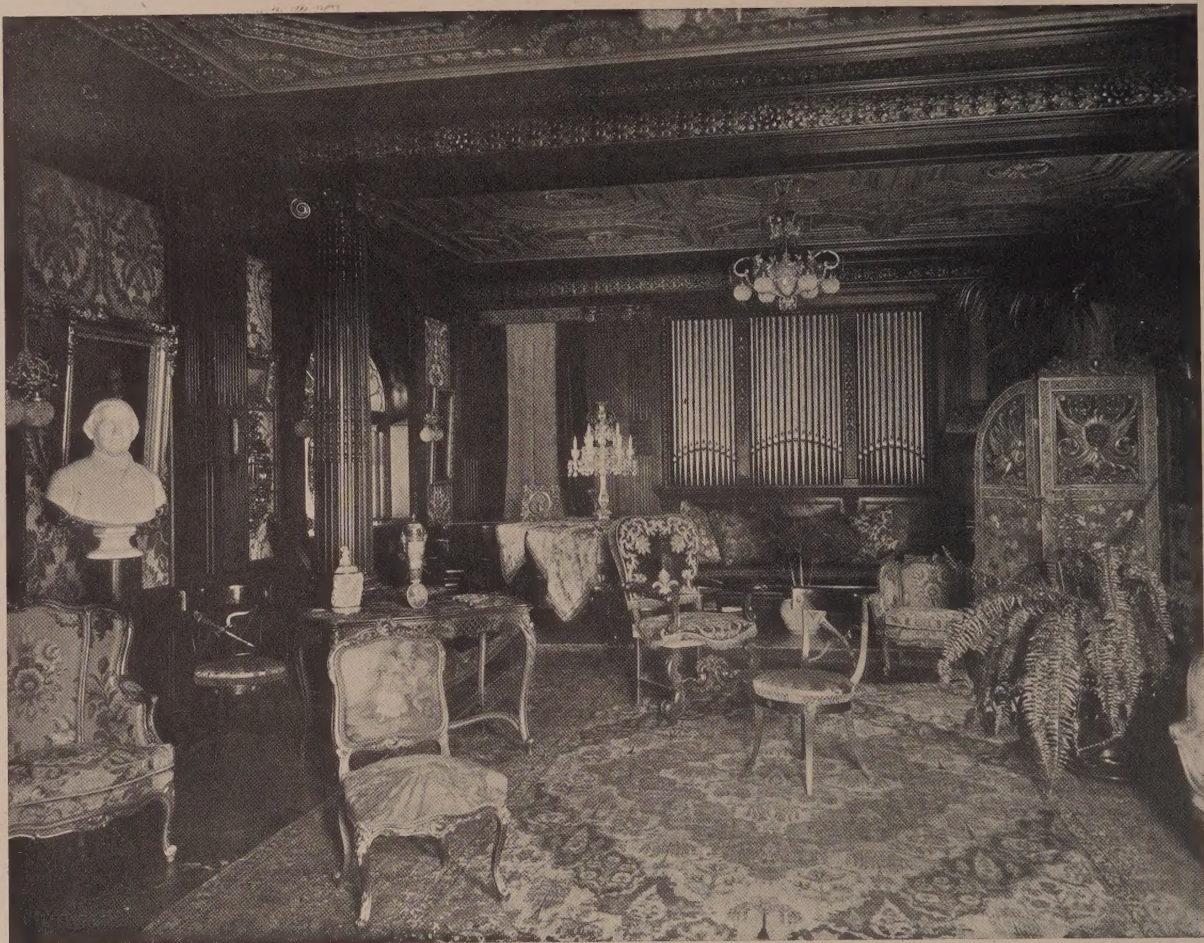


H. G. Simpson, Chelsea, Mass.

SECOND PRIZE, "ARCHITECTURE," COMPETITION—AN ARTIST'S COUNTRY HOUSE AND STUDIO. PERSPECTIVE.



SECOND PRIZE "ARCHITECTURE" COMPETITION—AN ARTIST'S COUNTRY HOUSE AND STUDIO. PLANS.
H. G. Simpson, Chelsea, Mass.



MUSIC ROOM, RESIDENCE, MRS. JOHN S. NEWBERRY, DETROIT, MICH.

Albert Kahn, Architect.

GOOD PLANNING.

ACCOMMODATION is the chief object of building. Whether we regard the individual unit, the family or a large assembly of persons, represented in the single room, the dwelling-house, or the public hall, the object of good planning and design is to so shape and fashion the building that each of these requirements is met in the best possible way without loss of space, inconvenience or awkwardness. But, as a matter of fact, these conditions are not always satisfied. The building is planned without reference to the occupants, their habits of life, or the fittings. To make the occupants and fittings suit the building, rather than to shape it to their wants, is the usual course of procedure. The sooner we look at this question fairly, discern its significance in the design of our buildings, the better. A good deal of our work is done to suit preconceived ideas of style, of plan and proportion without relation to existing facts. The requirements and habits of life of a laborer and a professional man are not all alike, and yet we find the difference of plan or design often regulated only by size or cost. Thus we have seen small country cottages replicas on a small scale of a gentleman's country house. The large family of a working man is housed in a dwelling that is only suitable for a professional man or well-to-do tradesman or city clerk. How little adapted are two rooms of, say, 10 ft. by 9 ft. each, to accommodate a large family, a big table and chairs;

whereas the two rooms thrown together would be made serviceable. The objection is greater when we turn to other particular rooms—say, a dining-room, a kitchen, or a billiard-room, in each of which the actual wants of the occupants have not been studied. How often, for example, does the architect trouble himself to proportion his dining-room upon any sound basis as to the size of table and number of guests, the room for sitters round the table and those who wait, size and position of sideboard and other furniture? We see kitchens sometimes so cramped as to make us wonder where the kitchen table is to be placed with light enough for the cook to know what she is about, or anything to be seen at the kitchen range. In a bedroom the position of the bed has to be considered in its relation to the door and fireplace. Of more complex buildings, such as hospitals, schools, municipal buildings, libraries, and public halls, the plans ought to be based on some unit, the bed, desk, and the seat, and the groupings of these units; but little attention is paid to them. A plan is fixed upon of certain dimensions that accord with other buildings of the same kind, and the seats, desks, beds, or other units are crammed into the space, and made to fit as well as possible; but this is not scientific planning. The designer should, by experiment or otherwise, know the area for each unit or individual, standing, seated, or recumbent, as the case may be, before he can decide upon the dimensions of his room or its proportion.